



946-151

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

March 6, 2002

RE: EPA's Hydrogeological Evaluation  
Saegertown Superfund Site

Mr. Gene Miller  
Manager of Environmental Service  
Lord Corporation  
4917 Pittsburgh Ave.  
P.O. Box 10038  
Erie, PA 16514-0038

Dear Mr. Miller:

The purpose of this letter is to assist you with the preparation of the revised 2001 Annual Report by providing a brief summary of EPA's hydrogeological evaluation of groundwater flow in the immediate vicinity of the Saegertown Site ("Site").

EPA disagrees with the Responsible Party's position that VOC's emanating from the Site do not migrate beyond the current physical boundary of French Creek, i.e., the western bank of French Creek. EPA supports your analysis of hydraulic conditions which "is in agreement with the glacial valley conceptual model where groundwater is recharged in the upland areas and flows downvalley where discharge of groundwater occurs in the valley drainage area." EPA contends that the valley drainage area extends slightly beyond the current western bank of French Creek.

Monitoring well nest GM-15S and GM-15D are located near the eastern bank of French Creek and reveal a downward flow of groundwater. VOC contamination in monitoring well GM-15D is approximately 200 ppb, comprised primarily of cis-1,2 DCE and vinyl chloride. The same contaminants, cis-1,2 DCE and vinyl chloride are observed 300 feet away just shortly beyond the western bank of French Creek in monitoring well GM-20D, indicating that some contamination is migrating beneath French Creek. I agree that a significant portion of the migrating groundwater may be discharging into French Creek, however I disagree that the valley drainage area is limited by the current physical boundary of the Creek. Limited contamination is present in GM-20D because it is located in the relatively flat portion of the valley, the valley drainage area.

EPA agrees with your interpretation of groundwater flow as you move further west, up the western slope of the valley. Groundwater flows from the west and toward the east (down the valley) where it discharges in the valley drainage area. Data from monitoring wells located further up the slope of the valley such as monitoring well GM-18D, support this observation.

Residential wells located in or near the base of the valley may also be located in the valley drainage area and impacted by the contaminants in a manner similar to GM-20D. The same contaminants detected in monitoring wells GM-15D and GM-20D, vinyl chloride and cis-1,2 DCE, are routinely detected at low levels in residential well PW-7 (see Table 7, 2001 Annual Report). Residential well PW-7 is located in the immediate vicinity of GM-20D.

Re-contouring of the Potentiometric Surface Map for Deep Wells reveals a broad flat low area that includes GM-15D, GM-20D and PW-7, indicating the potential for interconnection. Groundwater flow within or adjacent to the valley drainage area may also be affected by preferential flow pathways resulting from subsurface paleochannels which may be intercepted by monitoring wells and/or residential wells. Additional complicating factors such as pumping or injection rates and the heterogeneity of the subsurface will also affect groundwater flow and the migration of contaminants.

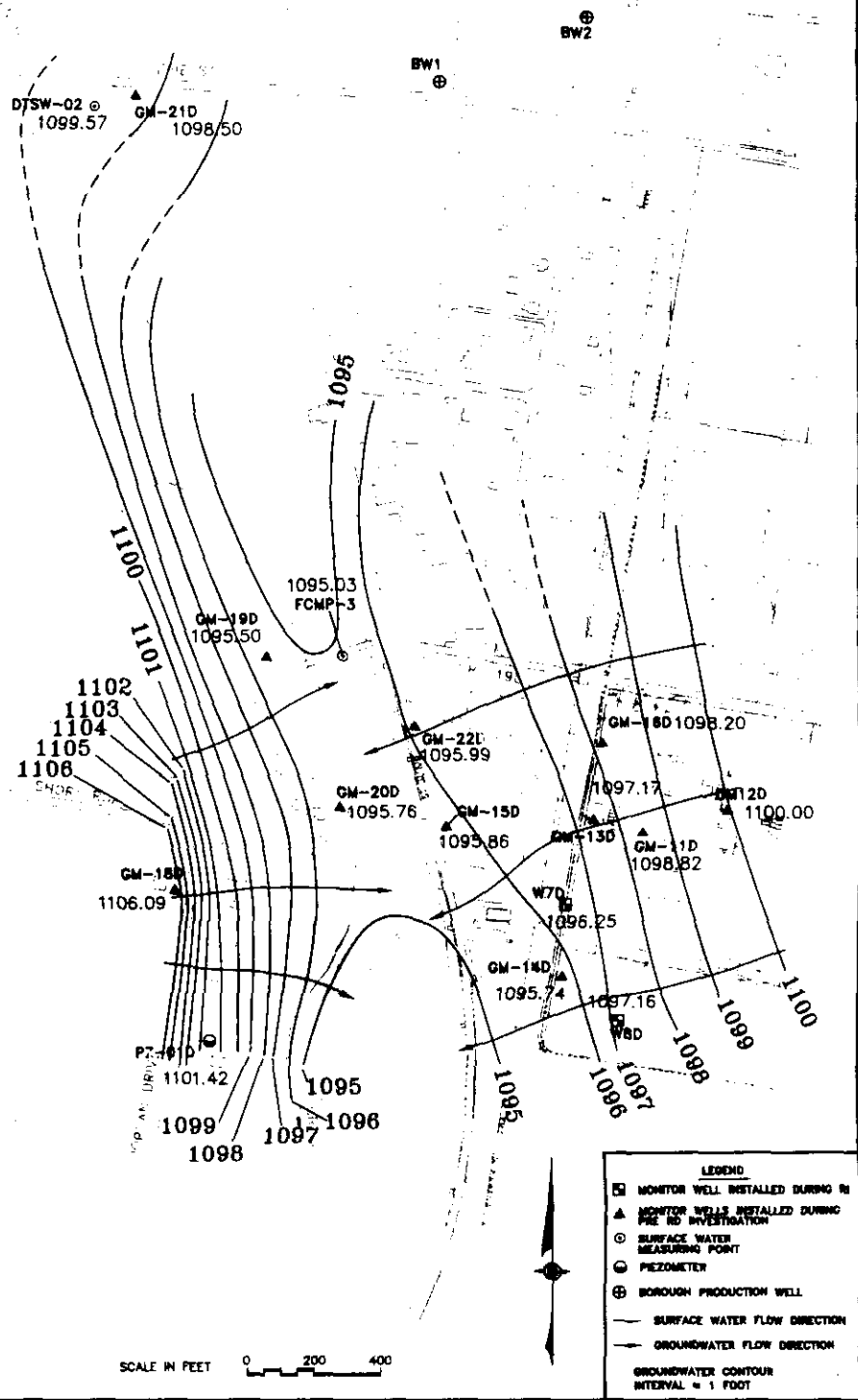
Feel free to contact me at (215) 814-3220 if you have questions or require additional information.

Sincerely,



Christopher J. Corbett  
Remedial Project Manager (3HS22)

cc: J. Reid (Arcadis G&M)



- LEGEND**
- ☐ MONITOR WELL INSTALLED DURING RI
  - ▲ MONITOR WELLS INSTALLED DURING PRE RI INVESTIGATION
  - SURFACE WATER MEASURING POINT
  - ⊙ PIEZOMETER
  - ⊕ BOROUGH PRODUCTION WELL
  - SURFACE WATER FLOW DIRECTION
  - GROUNDWATER FLOW DIRECTION
  - GROUNDWATER CONTOUR INTERVAL = 1 FOOT

**USEPA INTERPRETATION OF GROUNDWATER POTENTIOMETRIC SURFACE  
MAP, DEEP WELLS, SEPTEMBER 2001  
(SUMMER SAMPLING)**

LORD CORPORATION  
SARGENTOWN, PENNSYLVANIA